Segmenting Brand Value Perceptions of Consumers in Virtual Worlds: An Empirical Analysis Using the FIMIX Method

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ABSTRACT

Virtual worlds are emerging as a promising new channel for electronic marketing and brand-related activities. However, like Second Life. This paper examines the spectrum of perceptions of consumers of four major real-life brands (Armani, Dell, Mercedes and Hublot) that have established operations in Second Life. A survey was conducted using an avatar survey bot (n=1,039). Using the FIMIX-PLS procedure (Ringle et al., 2009), an axiological measurement instrument for brand value and formative modeling techniques, the authors identify segments of consumers with different perceptions of value for each brand. The analysis shows a clear difficulty in establishing ‘emotional’ rapport with consumers in Second Life.

Keywords: Axiology, Brand, FIMIX, PLS, Segmentation, Value, Virtual Worlds

INTRODUCTION

Interactive, immersive, 3-D ‘virtual worlds’ have been presented as a potentially noteworthy channel for marketing, and numerous companies have invested in building a presence in this new virtual environment (Barnes & Mattsson, 2008). DFC Intelligence (2007) estimate that virtual worlds will produce US$13 billion in revenues by 2012 with approximately two-fifths of this attributed to trading virtual assets. According to KZero (2010), the combined population of inhabitants of virtual worlds reached 800 million at the end of 2009. Some of the largest virtual worlds (the top three in each age group category) included: in the 5 to 10 years age group – Poptropica (83 million users), Barbie Girls (22 million users), Buildabearville (15 million users); in the 10 to 15 years age group – Habbo Hotel (158 million users), Neopets (58 million users) and Stardoll (46 million users); in the 15 to 20 years age group – Weeworld (32 million users), Gaia (25 million users) and Meez (14 million users); and in the over 20
years age group – IMVU (46 million users), Dofus (30 million users) and Second Life (19 million users).

According to Novak (in press), virtual worlds exhibit five core characteristics experienced by the user: a graphical 2D or 3D interface; a social context experienced by many individuals; interactivity and vividness of the virtual environment; a shared space for interaction; and persistence of the environment. Many virtual worlds, such as Second Life, have a solid basis for commercial growth, including an in-world currency, customization of avatars and objects, concepts of property ownership, text and/or voice communication, and numerous different marketplaces and communities (Castranova, 2005; Manninen & Kujanpää, 2007).

The role of brands in virtual worlds has been very interesting. A spike of interest was generated in marketing and brand building in virtual worlds during the period from 2007-2008. Such interest was spearheaded by the large number of real-world brands establishing a virtual presence in virtual worlds such as Second Life, the most popular venue for brand building in virtual worlds, with additional interest in those such as There, Habbo, Whyville, Frenzoo, Stardoll and Gaia. Indeed, some brands, such as Nike, Time Warner, Toyota, Sony and Universal Studies attempted to establish a presence in multiple worlds. Second Life contained well over 100 prominent real-life commercial brands at its peak (KZero, 2008; New Business Horizons, 2009), including those in sectors such as auto (e.g., BMW, Mercedes, Toyota, Honda, Renault, Mazda and Pontiac), media (e.g., AOL, Reuters, MTV, Warner Bros and Sony BMG), travel (e.g., STA Travel and Tui), consumer electronics (e.g., Intel, AMD, Dell, Nokia and Sony Ericsson), consumer goods (e.g. Adidas, Reebok, Nike, Armani, Calvin Klein, L’Oreal Paris and American Apparel), telecommunications (e.g. Vodafone, Orange and Telus), finance (e.g. ABN Amro, Saxo Bank and ING) and professional services (e.g., IBM, Logica and PA Consulting). Second Life has attracted the greatest number of real-world brands of any virtual world, which encouraged us to choose this virtual platform for this study.

Barnes and Mattsson (2009) empirically examine the value of real-life brands in Second Life and find that the content of emotional value created by the brands is very low, suggesting that this is likely to contribute to the explanation for the subsequent failure of many of these brands. In another study, Barnes and Mattsson (in press) explored the fit of real-life brands in Second Life using axiological theory and the concepts of real-life and virtual world brand value (measured via emotional, practical and logical value, which have decreasing value to consumers in that order), category fit (i.e. the fit with existing products), channel fit (i.e. the fit of the offering within new channel) and extension attitude. They find that real-life brand value drives category fit and channel fit which in turn drive extension attitude; extension attitude drives virtual world brand value. This suggests that success of brands in virtual worlds depends on both the fit of the brand itself and the types of products offered in the virtual world. This also implies that some virtual worlds may yield a better fit than others for a particular brand or product.

In an attempt to further contribute to understanding perceptions of brands in this new environment we embarked on a series of studies examining brand value in virtual worlds, focusing explicitly on the Second Life (SL) platform. This paper reports on one of the studies undertaken. This study is positioned as exploratory. The key research question for this paper is: “What dimensions of brand value do groups of consumers perceive for different real-life brands that have moved to the Second Life virtual world?” The approach we use to measure brand value is that of axiology (Hartman, 1967). As a formal theory it has demonstrated validity and reliability in marketing research (Barnes & Mattsson, 2009, in press; Lemmink & Mattsson, 1996; Mattsson, 1990; Mattsson & Wetzels, 2006; Ruyter et al., 1997). To identify different groups of consumers perceiving different types of value we used the FIMIX procedure in
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